



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Adress: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,837	03/06/2006	Danny Blanchard	00846-23343.PCT.US	8781
20551	7590	07/29/2008	EXAMINER	
THORPE NORTH & WESTERN, LLP. P.O. Box 1219 SANDY, UT 84091-1219			VERDIER, CHRISTOPHER M	
ART UNIT	PAPER NUMBER			
	3745			
MAIL DATE	DELIVERY MODE			
07/29/2008	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/570,837	Applicant(s) BLANCHARD ET AL.
	Examiner Christopher Verdier	Art Unit 3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

- 1) Responsive to communication(s) filed on 27 March 2008.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 and 15-24 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) _____ is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) 1-7 and 15-24 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-146/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, 15, and 23-24, drawn to a pump with a wiper extending across a portion of a rotatable disc.

Group II, claim(s) 16-22, drawn to a pump with a hollow cavity in a shaft and slots formed in the shaft.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I is drawn to a pump with a wiper extending across a portion of a rotatable disc, while Group II is drawn to a pump with a hollow cavity in a shaft and slots formed in the shaft, and Groups I and II do not have the same or corresponding special technical features.

In the event that Group I is elected, this application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

The disc surface having a featured selected from the group consisting of:

- 1) at least one channel, extending into the disc surface, and oriented radially with respect to an axis of rotation of the rotatable disc; at least one ridge, extending from the disc surface, and oriented radially with respect to an axis of rotation of the rotatable disc;
- 2) a plurality of dimples extending into the disc surface; a plurality of dimples, extending into the disc surface, and positioned in a linear array oriented radially with respect to an axis of rotation of the rotatable disc;
- 3) at least one arcuate blade, extending from the disc surface, and oriented in a spiral about an axis of rotation of the disc;
- 4) at least one arcuate channel, extending into the disc surface, and oriented in a spiral about an axis of rotation of the disc;
- 5) a cone shape with a longitudinal axis collinear with an axis of rotation of the disc;
- 6) a curved shape with a longitudinal axis collinear with an axis of rotation of the disc;
- 7) a random surface roughness; and a patterned surface roughness

The wiper having a feature selected from the group consisting of:

- 8) at least one channel or indentation, extending into a leading or trailing edge of the wiper; at least one ridge or protrusion, extending from a leading or trailing edge of the wiper; at least one ridge or protrusion, extending from the wiper in a direction away from the rotatable disc surface; at least one channel or indentation, extending into the wiper opposite the rotatable disc surface;
- 9) a leading or trailing edge extending across the disc a distance greater than a radius of the rotatable disc surface; a leading or trailing edge extending across the disc a distance less than

a radius of the rotatable disc surface; a leading or trailing edge with a curvature in a plane parallel with the rotatable disc surface or orthogonal to an axis of rotation of the rotatable disc surface; leading and trailing edges extending orthogonal to one another; leading and trailing edges extending at an acute angle to one another; leading and trailing edges with a convex curvature therebetween; leading and trailing edges with a concave curvature therebetween; a position extending across an axis of rotation of the disc; a position extending aside from an axis of rotation of the disc; a leading or trailing edge perpendicular to the rotatable disc surface; and a leading or trailing edge at an inclined angle with respect to the rotatable disc surface.

The pair of spaced apart rotatable discs having a feature selected from the group consisting of:

- 10) the opposing rotatable disc surfaces having a same surface roughness; the opposing rotatable disc surfaces having different surface roughnesses;
- 11) the opposing rotatable disc surfaces being parallel; the opposing rotatable disc surfaces being non-parallel; at least one of the rotatable disc surfaces being planar; at least one of the rotatable disc surfaces being non-planar; the opposing rotatable disc surfaces being planar; the opposing rotatable disc surfaces being non-planar; a common shaft interconnecting the rotatable discs; interconnected to rotate together at the same speed; and different diameters.
- 12) rotatable at different speeds;

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify

Art Unit: 3745

the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Claim 2, species 1-7.

Claim 3, species 8-9.

Claim 5, species 10-12.

The following claim(s) are generic: Claims 1, 4, 6-7, 15, and 23-24.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the reasons set forth above in the scope of claims of the species.

A telephone call was not made to request an oral election to the above restriction requirement, due to the complexity of the requirement.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Verdier/
Primary Examiner, Art Unit 3745

Christopher Verdier
Primary Examiner
Art Unit 3745